

SEQUENCE LISTING

<110> Thonnard, Joelle

<120> BASB006 Polypeptides from Neisseria  
Meningitidis and Immunogenic Compositions Thereof

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<150> 09/673,896

<151> 2000-12-18

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gttgc当地	cgccccggca	ggcaggcggg	gaaaatgtcg	gcattatgca	ggcggaggaa	3360
gagaaaaaaac	gggtgcaggc	ggataaaagac	accgccttgg	cgaaacagcg	cgaagcggaa	3420
acccggccgg	ctaccaccgc	cttccccgc	gccgc当地	ccgc当地	tttgc当地	3480
ctgcaacccc	aaccgcagcc	ccaaccgcag	cgc当地	tcagccgtt	tgccaaatagc	3540
gttttgagtg	aatttccgc	cacgctcaac	agcgtttcg	ccgtacagga	cgaatttagac	3600
cgc当地	ccgaaagaacg	ccgcaacgc	gttggacaa	gcggcatccg	ggacacccaa	3660
caactaccgtt	cgcaagattt	ccgc当地	cgccaaacaaa	ccgacctgc	ccaaatcggt	3720
atgc当地	acctcggcag	cgggcgc	ggcatctgt	tttc当地	ccggaccgaa	3780
aacaccttcg	acgacggcat	cgcaactcg	gcacggcttgc	cccacggc	cggtttcggg	3840
caatacggca	tcgacaggtt	ctacatcggc	atcagcgc	gcgc当地	tagcagcggc	3900
agccttcag	acggcatcg	aggcaaaatc	cgccgc当地	tgctgcatta	cgcattcag	3960
gcacgatacc	gwgccggtt	cgccggattc	ggcatcgac	cgcacatcg	cgc当地	4020
tatttcgtcc	aaaaagcga	ttaccgc当地	gaaaacgtca	atatgc当地	ccccggc	4080
gcattcaacc	gctaccgc	gggc当地	gcagattt	cattcaacc	ggc当地	4140
atttccatca	cgccttattt	gagcgttcc	tataccgat	ccgcttccgg	caaagtccg	4200
acacgcgtca	ataccgcgt	attggctcag	gatttgc当地	aaacccgcag	tgccgaaatgg	4260
ggcgttaaacg	ccgaaaatcaa	aggcttcac	ctgtccctcc	acgctgc	cgc当地	4320
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   20              25              30  
 Ser Phe Gly Ile Leu Pro Gln Ala Trp Ala Gly His Thr Tyr Phe Gly  
   35              40              45

Ile Asn Tyr Gln Tyr Tyr Arg Asp Phe Ala Glu Asn Lys Gly Lys Phe  
   50                       55                       60  
 Ala Val Gly Ala Lys Asp Ile Glu Val Tyr Asn Lys Lys Gly Glu Leu  
   65                       70                       75                       80  
 Val Gly Lys Ser Met Thr Lys Ala Pro Met Ile Asp Phe Ser Val Val  
   85                       90                       95  
 Ser Arg Asn Gly Val Ala Ala Leu Val Gly Asp Gln Tyr Ile Val Ser  
   100                      105                      110  
 Val Ala His Asn Gly Gly Tyr Asn Asn Val Asp Phe Gly Ala Glu Gly  
   115                      120                      125  
 Arg Asn Pro Asp Gln His Arg Phe Thr Tyr Lys Ile Val Lys Arg Asn  
   130                      135                      140  
 Asn Tyr Lys Ala Gly Thr Lys Gly His Pro Tyr Gly Gly Asp Tyr His  
   145                      150                      155                      160  
 Met Pro Arg Leu His Lys Phe Val Thr Asp Ala Glu Pro Val Glu Met  
   165                      170                      175  
 Thr Ser Tyr Met Asp Gly Arg Lys Tyr Ile Asp Gln Asn Asn Tyr Pro  
   180                      185                      190  
 Asp Arg Val Arg Ile Gly Ala Gly Arg Gln Tyr Trp Arg Ser Asp Glu  
   195                      200                      205  
 Asp Glu Pro Asn Asn Arg Glu Ser Ser Tyr His Ile Ala Ser Ala Tyr  
   210                      215                      220  
 Ser Trp Leu Val Gly Gly Asn Thr Phe Ala Gln Asn Gly Ser Gly Gly  
   225                      230                      235                      240  
 Gly Thr Val Asn Leu Gly Ser Glu Lys Ile Lys His Ser Pro Tyr Gly  
   245                      250                      255  
 Phe Leu Pro Thr Gly Gly Ser Phe Gly Asp Ser Gly Ser Pro Met Phe  
   260                      265                      270  
 Ile Tyr Asp Ala Gln Lys Gln Lys Trp Leu Ile Asn Gly Val Leu Gln  
   275                      280                      285  
 Thr Gly Asn Pro Tyr Ile Gly Lys Ser Asn Gly Phe Gln Leu Val Arg  
   290                      295                      300  
 Lys Asp Trp Phe Tyr Asp Glu Ile Phe Ala Gly Asp Thr His Ser Val  
   305                      310                      315                      320  
 Phe Tyr Glu Pro Arg Gln Asn Gly Lys Tyr Ser Phe Asn Asp Asp Asn  
   325                      330                      335  
 Asn Gly Thr Gly Lys Ile Asn Ala Lys His Glu His Asn Ser Leu Pro  
   340                      345                      350  
 Asn Arg Leu Lys Thr Arg Thr Val Gln Leu Phe Asn Val Ser Leu Ser  
   355                      360                      365  
 Glu Thr Ala Arg Glu Pro Val Tyr His Ala Ala Gly Gly Val Asn Ser  
   370                      375                      380  
 Tyr Arg Pro Arg Leu Asn Asn Gly Glu Asn Ile Ser Phe Ile Asp Glu  
   385                      390                      395                      400  
 Gly Lys Gly Glu Leu Ile Leu Thr Ser Asn Ile Asn Gln Gly Ala Gly  
   405                      410                      415  
 Gly Leu Tyr Phe Gln Gly Asp Phe Thr Val Ser Pro Glu Asn Asn Glu  
   420                      425                      430  
 Thr Trp Gln Gly Ala Gly Val His Ile Ser Glu Asp Ser Thr Val Thr  
   435                      440                      445  
 Trp Lys Val Asn Gly Val Ala Asn Asp Arg Leu Ser Lys Ile Gly Lys  
   450                      455                      460  
 Gly Thr Leu His Val Gln Ala Lys Gly Glu Asn Gln Gly Ser Ile Ser  
   465                      470                      475                      480  
 Val Gly Asp Gly Thr Val Ile Leu Asp Gln Gln Ala Asp Asp Lys Gly

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Lys Lys Gln Ala Phe Ser Glu Ile Gly Leu Val Ser Gly Arg Gly Thr			
500	505	510	
Val Gln Leu Asn Ala Asp Asn Gln Phe Asn Pro Asp Lys Leu Tyr Phe			
515	520	525	
Gly Phe Arg Gly Arg Leu Asp Leu Asn Gly His Ser Leu Ser Phe			
530	535	540	
His Arg Ile Gln Asn Thr Asp Glu Gly Ala Met Ile Val Asn His Asn			
545	550	555	560
Gln Asp Lys Glu Ser Thr Val Thr Ile Thr Gly Asn Lys Asp Ile Ala			
565	570	575	
Thr Thr Gly Asn Asn Ser Leu Asp Ser Lys Lys Glu Ile Ala Tyr			
580	585	590	
Asn Gly Trp Phe Gly Glu Lys Asp Thr Thr Lys Thr Asn Gly Arg Leu			
595	600	605	
Asn Leu Val Tyr Gln Pro Ala Ala Glu Asp Arg Thr Leu Leu Leu Ser			
610	615	620	
Gly Gly Thr Asn Leu Asn Gly Asn Ile Thr Gln Thr Asn Gly Lys Leu			
625	630	635	640
Phe Phe Ser Gly Arg Pro Thr Pro His Ala Tyr Asn His Leu Asn Asp			
645	650	655	
His Trp Ser Gln Lys Glu Gly Ile Pro Arg Gly Glu Ile Val Trp Asp			
660	665	670	
Asn Asp Trp Ile Asn Arg Thr Phe Lys Ala Glu Asn Phe Gln Ile Lys			
675	680	685	
Gly Gly Gln Ala Val Val Ser Arg Asn Val Ala Lys Val Lys Gly Asp			
690	695	700	
Trp His Leu Ser Asn His Ala Gln Ala Val Phe Gly Val Ala Pro His			
705	710	715	720
Gln Ser His Thr Ile Cys Thr Arg Ser Asp Trp Thr Gly Leu Thr Asn			
725	730	735	
Cys Val Glu Lys Thr Ile Thr Asp Asp Lys Val Ile Ala Ser Leu Thr			
740	745	750	
Lys Thr Asp Ile Ser Gly Asn Val Asp Leu Ala Asp His Ala His Leu			
755	760	765	
Asn Leu Thr Gly Leu Ala Thr Leu Asn Gly Asn Leu Ser Ala Asn Gly			
770	775	780	
Asp Thr Arg Tyr Thr Val Ser His Asn Ala Thr Gln Asn Gly Asn Leu			
785	790	795	800
Ser Leu Val Gly Asn Ala Gln Ala Thr Phe Asn Gln Ala Thr Leu Asn			
805	810	815	
Gly Asn Thr Ser Ala Ser Gly Asn Ala Ser Phe Asn Leu Ser Asp His			
820	825	830	
Ala Val Gln Asn Gly Ser Leu Thr Leu Ser Gly Asn Ala Lys Ala Asn			
835	840	845	
Val Ser His Ser Ala Leu Asn Gly Asn Val Ser Leu Ala Asp Lys Ala			
850	855	860	
Val Phe His Phe Glu Ser Ser Arg Phe Thr Gly Gln Ile Ser Gly Gly			
865	870	875	880
Lys Asp Thr Ala Leu His Leu Lys Asp Ser Glu Trp Thr Leu Pro Ser			
885	890	895	
Gly Thr Glu Leu Gly Asn Leu Asn Leu Asp Asn Ala Thr Ile Thr Leu			
900	905	910	
Asn Ser Ala Tyr Arg His Asp Ala Ala Gly Ala Gln Thr Gly Ser Ala			
915	920	925	

Thr Asp Ala Pro Arg Arg Arg Ser Arg Arg Ser Arg Arg Ser Leu Leu  
 930 935 940  
 Ser Val Thr Pro Pro Thr Ser Val Glu Ser Arg Phe Asn Thr Leu Thr  
 945 950 955 960  
 Val Asn Gly Lys Leu Asn Gly Gln Gly Thr Phe Arg Phe Met Ser Glu  
 965 970 975  
 Leu Phe Gly Tyr Arg Ser Asp Lys Leu Lys Leu Ala Glu Ser Ser Glu  
 980 985 990  
 Gly Thr Tyr Thr Leu Ala Val Asn Asn Thr Gly Asn Glu Pro Ala Ser  
 995 1000 1005  
 Leu Glu Gln Leu Thr Val Val Glu Gly Lys Asp Asn Lys Pro Leu Ser  
 1010 1015 1020  
 Glu Asn Phe Asn Phe Thr Leu Gln Asn Glu His Val Asp Ala Gly Ala  
 1025 1030 1035 1040  
 Trp Arg Tyr Gln Leu Ile Arg Lys Asp Gly Glu Phe Arg Leu His Asn  
 1045 1050 1055  
 Pro Val Lys Glu Gln Glu Leu Ser Asp Lys Leu Gly Lys Ala Glu Ala  
 1060 1065 1070  
 Lys Lys Gln Ala Glu Lys Asp Asn Ala Gln Ser Leu Asp Ala Leu Ile  
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 Ala Ala Gly Arg Asp Ala Val Glu Lys Thr Glu Ser Val Ala Glu Pro  
 1090 1095 1100  
 Ala Arg Gln Ala Gly Gly Glu Asn Val Gly Ile Met Gln Ala Glu Glu  
 1105 1110 1115 1120  
 Glu Lys Lys Arg Val Gln Ala Asp Lys Asp Thr Ala Leu Ala Lys Gln  
 1125 1130 1135  
 Arg Glu Ala Glu Thr Arg Pro Ala Thr Thr Ala Phe Pro Arg Ala Arg  
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 Arg Ala Arg Arg Asp Leu Pro Gln Leu Gln Pro Gln Pro Gln  
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 Pro Gln Arg Asp Leu Ile Ser Arg Tyr Ala Asn Ser Gly Leu Ser Glu  
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 Phe Ser Ala Thr Leu Asn Ser Val Phe Ala Val Gln Asp Glu Leu Asp  
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 Arg Val Phe Ala Glu Glu Arg Arg Asn Ala Val Trp Thr Ser Gly Ile  
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 Arg Asp Thr Lys His Tyr Arg Ser Gln Asp Phe Arg Ala Tyr Arg Gln  
 1220 1225 1230  
 Gln Thr Asp Leu Arg Gln Ile Gly Met Gln Lys Asn Leu Gly Ser Gly  
 1235 1240 1245  
 Arg Val Gly Ile Leu Phe Ser His Asn Arg Thr Glu Asn Thr Phe Asp  
 1250 1255 1260  
 Asp Gly Ile Gly Asn Ser Ala Arg Leu Ala His Gly Ala Val Phe Gly  
 1265 1270 1275 1280  
 Gln Tyr Gly Ile Asp Arg Phe Tyr Ile Gly Ile Ser Ala Gly Ala Gly  
 1285 1290 1295  
 Phe Ser Ser Gly Ser Leu Ser Asp Gly Ile Gly Gly Lys Ile Arg Arg  
 1300 1305 1310  
 Arg Val Leu His Tyr Gly Ile Gln Ala Arg Tyr Arg Ala Gly Phe Gly  
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 Gly Phe Gly Ile Glu Pro His Ile Gly Ala Thr Arg Tyr Phe Val Gln  
 1330 1335 1340  
 Lys Ala Asp Tyr Arg Tyr Glu Asn Val Asn Ile Ala Thr Pro Gly Leu  
 1345 1350 1355 1360  
 Ala Phe Asn Arg Tyr Arg Ala Gly Ile Lys Ala Asp Tyr Ser Phe Lys

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Pro Ala Gln His Ile Ser Ile Thr Pro Tyr Leu Ser Leu Ser Tyr Thr			
1380	1385		1390
Asp Ala Ala Ser Gly Lys Val Arg Thr Arg Val Asn Thr Ala Val Leu			
1395	1400		1405
Ala Gln Asp Phe Gly Lys Thr Arg Ser Ala Glu Trp Gly Val Asn Ala			
1410	1415		1420
Glu Ile Lys Gly Phe Thr Leu Ser Leu His Ala Ala Ala Ala Lys Gly			
1425	1430	1435	1440
Pro Gln Leu Glu Ala Gln His Ser Ala Gly Ile Lys Leu Gly Tyr Arg			
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Trp			

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34

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40